# Preliminary DRAFT Cedar River Tributaries Chinook Population - Tier 2 - Initial Habitat Project List Includes Potential Restoration and Protection Projects by Reach. Walsh Ditch Reaches 1-8

WRIA 8 Technical Recommendation: The WRIA 8 Technical Committee recommends that the benefits of re-directing Walsh Ditch back into Upper Rock Creek versus keeping it at it's current location be studied. Walsh Ditch was not evaluated in its current location pending such a study and because there is no "template condition" to compare to the stream's existing habitat conditions. The benefits of re-directing the stream to its original watershed could be analyzed during treatment phase of EDT.

PLEASE NOTE: Following potential site-specific projects are actions that could be taken to improve Walsh Ditch for Chinook if it remains in its current location.

### Reach 1: Walsh Ditch from mouth to RM 0.2 (bottom of ravine) Restoration

Technical Hypothesis:

Projec	t Reach	Reach	NTAA #	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.
#	#	Restor.			w/Tech.	Cost		to	H, M, L
		Benefit			Hypoth.			Chinook	
		Rank			(Y/N)			H, M. L	
C353	1	not	new	Riparian Restoration and Conifer Underplanting: Lower	Υ		LWD is not needed in reach due to past restoration	Н	Н
		ranked		Walsh suffered heavy tree loss during 2004 windstorm.			project to add LWD and the 2004 windstorm.		
				Replant with conifers and maintain riparian area to prevent					
				invasion by non-native, invasive plant species.					
				linvasion by non-native, invasive plant species.					
		1							

#### **Protection**

**Technical Hypothesis:** 

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Pro	ject	Reach	Reach	Existing	NTAA	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.
	#	#	Prot.	Prot.	#		w/Tech.	Cost	· · · · · · · · · · · · · · · · · · ·	to	H, M, L
			Benefit	Priority			Hypoth.			Chinook	ı I
			Rank	(Y/N)			(Y/N)			H, M. L	1
		1	not			No projects identified at this time.					
			ranked			The projecto race mineral at an orange					ı l

### Reach 2: Walsh Ditch from RM 0.2 to RM 0.6 (seasonal barrier, top of ravine); End Chinook Distribution Restoration

	piect Reach Reach NTAA # NTAΔ Name & Description Fits Approx. Notes Key Uncertainties Benefits Feasib.												
Project	Reach	Reach	NTAA #	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.				
#	#	Restor.			w/Tech.	Cost		to	H, M, L				
		Benefit			Hypoth.			Chinook					
		Rank			(Y/N)			H, M. L					
C354	2	not ranked		Riparian Restoration and Conifer Underplanting: Lower Walsh suffered heavy tree loss during 2004 windstorm. Replant with conifers and maintain riparian area to prevent invasion by non-native, invasive plant species.	Y		LWD is not needed in reach due to past restoration project to add LWD and the 2004 windstorm.	Н	Н				

#### **Protection**

### Technical Hypothesis:

Project #	Reach #	Reach Prot.	Existing Prot.	NTAA #	NTAA Name & Description	Fits w/Tech.	Approx. Cost	Notes, Key Uncertainties	Benefits to	Feasib. H, M, L
		Benefit Rank	Priority (Y/N)			Hypoth. (Y/N)			Chinook H, M. L	
	2	not ranked			No projects identified at this time.					

# Reach 3: Walsh Ditch from RM 0.6 (seasonal barrier) to RM 1.1 (SPU Watershed Boundary, 276th Ave SE) Restoration

Technical Hypothesis:

Project	Reach	Reach	NTAA #	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib
#	#	Restor.			w/Tech.	Cost	,,	to	H, M, L
		Benefit			Hypoth.			Chinook	
		Rank			(Y/N)			H, M. L	
C355	3	not	new	Improve Fish Passage: Improve Chinook passage over	Υ		Concern raised that Reach 3 is ditched and unlikely to	M/L	Н
		ranked		velocity barrier in ravine.			be used by large-bodied Chinook.		
C356	3	not	new	Protect Riparian Corridor in Reach 3: Work with private	Y		Most of Walsh is in protective ownership except for	H/M	H/M
		ranked		property owners in reach to protect riparian corridor and			Reach 3.		
				forest cover in reach through acquisition, conservation					
				easements, education and farmplans for livestock.					
				easements, education and familyians for livestock.					

#### Protection

**Technical Hypothesis:** 

Pro	oject F	Reach	Reach	Existing	NTAA	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.
	#	#	Prot.	Prot.	#		w/Tech.	Cost		to	H, M, L
			Benefit	Priority			Hypoth.			Chinook	
			Rank	(Y/N)			(Y/N)			H, M. L	
		3	not			No projects identified at this time.					
			ranked			p. sjesse sassimise at and anner					

# Reach 4: Walsh Ditch from RM 1.1 (SPU Watershed Boundary) to RM 1.6 (lower end of "natural" reach) Restoration

Project	Reach	Reach	NTAA #	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.			
#	#	Restor.			w/Tech.	Cost		to	H, M, L			
		Benefit			Hypoth.			Chinook				
		Rank			(Y/N)			H, M. L				
		not		No projects identified at this time.								
		ranked		The projects racination at another and								

#### **Protection**

Technical Hypothesis:

Project #	#	Prot.	Existing Prot. Priority (Y/N)	#	NTAA Name & Description	Fits w/Tech. Hypoth. (Y/N)	Approx. Cost	Notes, Key Uncertainties	Benefits to Chinook H, M. L	Feasib. H, M, L
		not ranked			No projects identified at this time.					

# Reach 5: Walsh Ditch from RM 1.6 (lower end of "natural" reach) to RM 2.1 (upstream end of "natural" reach) Restoration

Technical Hypothesis:

F	Project #	Reach Restor. Benefit Rank	NTAA #	NTAA Name & Description	Fits w/Tech. Hypoth. (Y/N)	Approx. Cost	Notes, Key Uncertainties	Benefits to Chinook H, M. L	Feasib. H, M, L
		not ranked		No projects identified at this time.					

#### **Protection**

Technical Hypothesis:

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Project	Reach	Reach	Existing	NTAA	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.
#	#	Prot.	Prot.	#		w/Tech.	Cost	Traise, riey emeericaning	to	H, M, L
		Benefit	Priority			Hypoth.			Chinook	
		Rank	(Y/N)			(Y/N)			H, M. L	
		not			No projects identified at this time.					
		ranked			The project the same as a second					

# Reach 6: Walsh Ditch from RM 2.1 (upstream end of "natural" reach) to 40/18 Rd Junction (RM 3.8) Restoration

Technical Hypothesis:

		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Project	Reach	Reach	NTAA #	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.
#	#	Restor.			w/Tech.	Cost		to	H, M, L
		Benefit			Hypoth.			Chinook	
		Rank			(Y/N)			H, M. L	
		not		No projects identified at this time.					
		ranked							

#### **Protection**

Project	Reach	Reach	Existing	NTAA	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	
#	#	Prot.	Prot.	#	•	w/Tech.	Cost	, ,	to	H, M, L
		Benefit	Priority			Hypoth.			Chinook	
		Rank	(Y/N)			(Y/N)			H, M. L	
		not			No projects identified at this time.					
		ranked								

# Reach 7: Walsh Ditch from 40/18 Rd Junction (RM 3.8) to Walsh Lake outlet (RM 4.1) Restoration

Technical Hypothesis:

Project #	Reach Restor.	NTAA #	NTAA Name & Description	Fits with Tech.	Approx. Cost	Notes, Key Uncertainties	Benefits to	Feasib. H, M, L
	Benefit Rank			Hypoth. (Y/N)			Chinook H, M. L	
	not ranked		No projects identified at this time.					

### **Protection**

Technical Hypothesis:

Projec	Reach	Reach	Existing	NTAA	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.	
#	#	Prot.	Prot.	#		w/Tech.	Cost		to	H, M, L	
		Benefit	Priority			Hypoth.			Chinook		
		Rank	(Y/N)			(Y/N)			H, M. L		
		not			No projects identified at this time.						
		ranked			The projecto recrimined at time time.						

### Reach 8: Walsh Lake

Restoration

Technical Hypothesis:

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Reach	Reach	NTAA #	NTAA Name & Description	Fits	Approx.	Notes. Key Uncertainties	Benefits	Feasib.				
#	Restor.			w/Tech.	Cost	[ ,	to	H, M, L				
	Benefit			Hypoth.			Chinook					
	Rank			(Y/N)			H, M. L					
8	not		No projects identified at this time.									
	ranked		The projects recrimed at all of the projects and the projects are the projects and the projects are the projects and the projects are the project									
		Reach Restor. Benefit Rank 8 not	Reach Reach NTAA # Restor. Benefit Rank 8 not	Reach   Reach   Restor.   Benefit   Rank   No projects identified at this time.   Reach   Reach   Restor.   Reach   Restor.   Reach   Reach   Restor.   Reach   Restor.   Reach   Restor.   Reach   Restor.   Reach   Restor.   Reach   Reach   Restor.   Reach   Restor.   Reach   Restor.   Reach   Restor.   Reach   Restor.   Reach   Restor.   Restor.   Reach   Restor.   Reach   Restor.   Reach   Restor.   Restor.   Reach   Restor.   Reach   Restor.   Restor.	Reach   Reach   Restor   Benefit   Rank   NTAA #   NTAA Name & Description   Fits   W/Tech.   Hypoth.   (Y/N)	Reach   Reach   Restor   Benefit   Rank   NTAA #   NTAA Name & Description   Fits   W/Tech.   Cost   Hypoth.   (Y/N)     8   not   No projects identified at this time.	Reach   Restor   Restor   Benefit   Rank   No projects identified at this time.   Reach   Re	Reach   Rest   Restor   Restor   Benefit   Restor   Rank   Rank   No projects identified at this time.   No projects identified at th				

### **Protection**

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Projec	Reach	Reach	Existing	NTAA	NTAA Name & Description	Fits	Approx.	Notes, Key Uncertainties	Benefits	Feasib.		
#	#	Prot.	Prot.	#		w/Tech.	Cost	·····, ·· <b>,</b> ··· ···	to	H, M, L		
		Benefit	Priority			Hypoth.			Chinook			
		Rank	(Y/N)			(Y/N)			H, M. L			
	8	not			No projects identified at this time.							
		ranked			To projecte ruorimou ut uno unito							